

Mesoscale Science Workshop

Breakout Panel 4: Mesoscale Architecture and Advanced Manufacturing B1739 R1020

August 13th, 2013

- 2:30 p.m. Introduction and Goals for the Breakout, **C. Spadaccini** (LLNL)
- 2:40 p.m. Architected Materials and Metallic Microlattices, **W. Carter** (HRL)
- 3:10 p.m. Ultra-Stiff, Ultra-Light Mechanical Metamaterials, **X. Zheng** (LLNL)
- 3:25 p.m. Panel Discussion and Identification of New Directions and Critical Research Paths for Structural/Mechanical Architected Materials
- 3:50 p.m. **Break**
- 4:00 p.m. Architected Energetic Materials, **K. Sullivan** (LLNL)
- 4:15 p.m. Functional Materials, **C. Spadaccini** (LLNL)
- 4:30 p.m. Panel Discussion and Identification of New Directions and Critical Research Paths for Functional Architected Materials
- 5:00 p.m. *Adjourn*

August 14th, 2013

- 9:00 a.m. Modeling and Simulations of Architected Materials, **L. Valdevit** (UC Irvine)
- 9:30 a.m. Modeling and Simulation of Cellular Silicones, **T. Weisgraber** (LLNL)
- 9:45 a.m. Panel Discussion and Identification of New Directions and Critical Research Paths for Modeling and Simulation of Architected Materials
- 10:20 a.m. **Break**
- 10:30 a.m. Manufacturing Processes – EPD and P μ SL, **J. Kuntz** (LLNL)
- 11:00 a.m. Manufacturing Processes – Direct Ink Writing, **E. Duoss** (LLNL)

Chairs: Chris Spadaccini (LLNL), Bill Carter (HRL)
Admin POC: Kim Elmore

11:30 a.m. Panel Discussion and Identification of New Directions and Critical Research Paths for Manufacturing of Architected Materials

12:15 p.m. **Lunch**

2:00p.m. Produce Viewgraphs on Priority Research Directions

3:30 p.m. Rejoin Main Meeting to Report Out

5:00 p.m. *Adjourn*

August 15th, 2013

9:00 a.m. Write Reports (Co-chairs, and panelists)

12:00 p.m. Adjourn